

REMARKS

Favorable consideration of this Application as presently amended and in light of the following discussion is respectfully requested.

After entry of the foregoing Amendment, Claims 1-21 are pending in the present Application. Claims 1-21 are rejected. Claim 17 has been amended. Claims 13 and 14 have been amended. Part of the feature of claim 17 was incorporated into claims 13 and 14. In addition part of claim 14 has been incorporated into claim 13. Claim 22 has been added. Support for newly added claim 22 can be found in the original claim 17. No new matter has been added.

The fee for the extra one claim over twenty can be charged to our Deposit Account No. 03-2775, under Order No. 13077-00098-US from which the undersigned is authorized to draw.

By way of summary, the Official Action presents the following issues: Claim 21 stands rejected under 35 U.S.C. § 112, second paragraph, allegedly being indefinite; Claim 13 stands rejected under 35 U.S.C. § 102 allegedly being anticipated by Yates (U.S. Patent No. 3,630,954) ("Yates"); Claims 14-20 stand rejected under 35 U.S.C. § 102 allegedly being anticipated by Yates; Claim 13 stands rejected under 35 U.S.C. § 102 as allegedly being anticipated by Andersson et al. (U.S. Patent No. 5,603,805, hereinafter "Andersson"); Claims 14-20 stand rejected under 35 U.S.C. § 102 as allegedly being anticipated by Andersson; Claim 13 stands rejected under 35 U.S.C. § 102 as allegedly being anticipated Johnsson et al. (U.S. Patent No. 5,643,414, hereinafter "Johnsson"); Claims 14-20 stand rejected under 35 U.S.C. § 102 as allegedly being anticipated by

Johnsson; and, Claims 1-12 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Yates. The applicant respectfully traverses these rejections.

Rejection under 35 USC § 112

Claim 21 stands rejected under 35 U.S.C. § 112, second paragraph, allegedly being indefinite. The silica sols according to the applicant's claimed invention can be used in the paper retention (see page 4, lines 5-9 of the specification). The use of silica sols for improving retention in the production of paper is described for example in Anderson (US 5,603,805, column 1). Enclosed is a document written by company producing retention solutions. In the second paragraph they describe the purpose of retention. The inventive silica sols are used as a mixture with cationic polymers (see page 13, lines 21-29 of the specification) to achieve the purpose of paper retention. For the above reasons, this rejection should be withdrawn.

Rejection of Claim 13

Claim 13 was rejected under 35 U.S.C. § 102 allegedly being anticipated by Yates. Claim 13 was rejected under 35 U.S.C. § 102 as allegedly being anticipated by Andersson. Claim 13 was rejected under 35 U.S.C. § 102 as allegedly being anticipated Johnsson. The Applicant has incorporated the features of claims 14 and 17 into this claim. The applicant does not believe that these references disclose these features. For the above reasons, these rejections should be withdrawn.

Rejections of Claim 14-20

Claims 14-20 was rejected under 35 U.S.C. § 102 allegedly being anticipated by Yates. Claims 14-20 stand rejected under 35 U.S.C. § 102 as allegedly being anticipated by Andersson. Claims 14-20 stand rejected under 35 U.S.C. § 102 as allegedly being anticipated by Johnsson.

Yates describes a silica sol containing a small amount of guanidine oxide and a large amount of dimethylamine. Yates requires an amine which is excluded from the applicant's claim 14. The amended claim 14 covers a silica sol which is free of amine. For the above reasons, this rejection should be withdrawn.

Johansson describes the use of aluminum-modified silica sols for producing paper. Further, Johansson does not mention nor teach that said silica sol comprises from 0.05 to 15% by weight of guanidinium ions, based on the total weight of the silica sol as is required by the Applicant's claimed inventive silica sol (see claim 14). In addition, it is one of the objects of the applicant's invention not to use aluminum-modified silica sols (see pages 4, lines 5-9 of the specification and see claim 17). For the above reasons, this rejection should be withdrawn.

Andersson discloses non-modified silica sols suitable for use in papermaking. It is possible to stabilize these silica sols by an aluminum modification (see column 4, lines 1-15). Further, Andersson does not mention or teach that said silica sol comprises from 0.05 to 15% by weight of guanidinium ions, based on the total weight of the silica sol as

is required by the Applicant's claimed inventive silica sol (see claim 14). For the above reasons, this rejection should be withdrawn.

Hence, none of the cited documents anticipate the silica sol according to the amended claim 14.

35 USC § 103 Rejection

Claims 1-12 stand rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Yates.

As the Examiner correctly stated Yates discloses mixing a silica sol with a guanidine compound (guardine hydroxide). Also as the Examiner correctly recognized at page 5 of the Office Action, Yates does not teach nor disclose the use of guanidine carbonate as is required by the Applicant's claimed invention (see the applicant's claim 1). For this reason alone this rejection should be withdrawn.

With respect to claim 5, the Examiner correctly stated at page 5 of the Office Action that Yates does not recognize that the process is continuous.

With respect to claim 3 requires specific bases which do not claim amines as is required by Yates. Yates claims a process comprising the preparation of a guanidine-containing fresh sol and the addition of an amine thereby obtaining guanidine- amine-containing silica sol.

Another difference from Yates and the applicant's claims 3 and 22 is that the addition of an amine as an organic amine is a requirement of Yates and is excluded in claim 22. Yates teaches that for getting a (silica sol) composition having the desired properties it is necessary that one component of this composition is an organic amine. A

person skilled in the art would not come to the applicant's claim process of claims 3 and 22 by employing the processes of Yates as the applicant's process does not include the addition of an amine as a base. Yates requires the amine base and does not give a suggestion that a process for preparing silica sols having the desired properties could be used without employing any amines as bases. Additionally, the obtained compositions are different as the applicant's composition can be free of an amine or are free of an amine (see claims 13-22).

According to the applicant's pending claim 1 a fresh sol is being mixed with a guanidine carbonate. By mixing a silica sol with a guanidine compound the high BET surface area can not be kept for a long time, i.e., this value is decreasing. Another difference between the Applicant's inventive process and the process according to Yates is that the Applicant's silica sol has a high stability in combination with a large BET surface area. Therefore, the Applicant's instant claim 1 is not obvious over Yates.

The Examiner must consider Yates as a whole, In re Yates, 211 USPQ 1149 (CCPA 1981). The Examiner cannot selectively pick and choose from the disclosed multitude of parameters without any direction as to the particular one selection of the reference without proper motivation. The mere fact that Yates may be modified to reflect features of the claimed invention does not make modification, and hence claimed invention, obvious **unless the prior art suggested the desirability of such modification** (In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); In re Baird, 29 USPQ 2d 1550 (CAFC 1994) and In re Fritch, 23 USPQ 2nd. 1780 (Fed. Cir. 1992)). In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (in a

determination under 35 U.S.C. § 103 it is impermissible to simply engage in a hindsight reconstruction of the claimed invention; the references themselves must provide some teaching whereby the applicant's combination would have been obvious); In re Dow Chemical Co., 837 F.2d 469,473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) (under 35 U.S.C. § 103, both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure). The applicants disagree with the Examiner why one skilled in the art with the knowledge of Yates would selectively modify Yates in order to arrive at the applicants' claimed invention.

There is no disclosure or teaching in Yates to use guanidine carbonate as is required by the Applicant's claimed invention of claim 1. In addition, Yates does not disclose nor teach the feature of claim 5 (continuous process). The Examiner's argument is clearly based on hindsight reconstruction. For the above reasons, this rejection should be withdrawn.

A three month extension fee has been paid. Applicant believes no additional fee is due with this request. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13077-00098-US from which the undersigned is authorized to draw.

Respectfully submitted,

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